

Original Article

Reviving a forgotten choice: Community perspectives & expert insights on vasectomy acceptance in rural South India: A qualitative study

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Background & objectives: Is Vasectomy still an option? The study aims to explore the potential barriers and beliefs regarding vasectomy from community perspective and also seeks to find possible solutions from experts to improve uptake of vasectomy.

Methods: The study was conducted using a qualitative study design using 11 focus group discussions (FGD) (n=94) conducted among self-help groups of neighbouring villages; and in-depth interviews (IDI) among male non-teaching staff (n=34) until point of saturation. To capture the magnitude of specific barriers and facilitating factors for vasectomy uptake, force field analysis (n=14) was done. Nominal group techniques were conducted among the experts who are involved in providing contraceptive care to obtain possible solutions to improve vasectomy uptake. Participants and experts were selected using a purposive sampling technique with maximum variation, key informant sampling strategies were used.

Results: Seven thematic categories emerged from FGD and IDI, namely personal belief, gender discrimination, unfavourable workplace environment, religious belief, family disputes, health literacy, and family planning practices. Positive deviance approach by men who undergo vasectomy and participatory methods to involve social and religious leaders in the awareness campaign were the solutions suggested as solutions by experts.

Interpretation & conclusions: Vasectomy opposition should not be attributed solely to ignorance, but rather to the interconnections of caste, religion, patriarchy, and gendered power relations. Policies should be male-centred, culturally sensitive, incentive-supported, and frame sterilisation as a shared family responsibility.

Key words Force field analysis - nominal group technique - triangulation vasectomy

Family planning is fundamental to public health, greatly enhancing mother and child survival, economic stability and overall society welfare¹⁻⁵. Vasectomy is

one of the safest most cost-effective and least intrusive permanent contraceptive treatments exhibiting less problems and a quicker recovery than female

sterilization⁶⁻⁸. Despite these benefits its adoption in India has consistently diminished. According to NFHS-5 vasectomy was responsible for about one-third of all sterilization in the late 1980s, but it fell to 3.4 per cent in 1998–1999 and is still less than one per cent (0.3%)². Literature highlights sociological perspective: male sterilization is opposed not only due to false information but also because it goes against traditional conceptions of masculinity, which link virility and social standing to fertility. It is only a woman's responsibility, and myths of libido loss, weakness, or incapacity to work are frequently highlighted in studies^{3,9-12}. Inadequate service preparation in rural areas, limited provider involvement in counselling men, and gender stereotypes that frame family planning as "women's work" all contribute to obstacles which has to be addressed^{3,4,10}. Anthropological research also demonstrates how the 1970s coercive 'nasbandi' campaign served as cultural memory that influences the stigma and mistrust surrounding vasectomy programs¹². Existing studies focus on myths but do not explore men's own voices, community-level influences, or stakeholder perspectives.

Although universal access to sexual and reproductive healthcare is one of the sustainable development goals (Target 3.7), it is impeded in India by ingrained gender bias and the marginalization of male-centred approaches^{2,13}. The Family Planning Division of the Ministry of Health and Family Welfare, Government of India has launched 'Vasectomy Fortnight' as part of a nationwide IEC (information, education and communication) campaign and also emphasized in Mission *Parivaar Vikas*¹⁴. In response to this initiative, we designed a qualitative study to gain insights into the social-cultural and community dynamics factors influencing the vasectomy acceptance.

The current study was done to explore rural community perspective on vasectomy through self-help group members, its influencing factors and to find possible solution from stakeholders to improve vasectomy uptake.

Materials & Methods

This qualitative study was undertaken by the Department of Community Medicine, Sri Manakula Vinayagar Medical College and Hospital, Puducherry, India, after obtaining ethical clearance from the Institutional Ethical Committee. The study was conducted between October and December 2022. Ethical principles such as autonomy, beneficence, non-maleficence, and justice were adhered to throughout

the study. Confidentiality of the patients was ensured by limiting the use of their names and addresses, *etc.* The audio recording and transcripts were stored in the PI's computer with a password.

Study area and study setting: This community-based study was conducted in field practice area of the primary health centre (PHC), Thirubuvanai. The study area consisted of 14 villages. Many factories are located in and around Thirubhuvani, leading a significant portion of the community to be engaged in industrial work, with others primarily involved in agriculture.

Study design: We employed a qualitative research design with a phenomenological approach⁶. We also used multiple data collection techniques for triangulation of qualitative research methods⁶. We have used in-depth interviews (IDI)^{15,16} focused group discussion (FGD)¹⁵ and force field analysis (FFA), a participatory rural appraisal (PRA) technique in the community¹³. We employed nominal group technique¹⁷ (NGT), a systematic technique to build consensus with the stakeholders for the solutions to the barriers to vasectomy uptake. We also used investigator triangulation to confirm the findings from diverse perspectives.

Study participants, sample size and sampling: Focused group discussion and in-depth interview: For FGDs, self-help group (SHG) members, belonging to 18-45 yr of age, married, who are vocal and willing, from various religions such as Hindu (7 FGDs), Muslim (2 FGDs), and Christian communities (2 FGDs) were included. A total of eleven FGDs were conducted (n=94 participants), each session involving 10 to 15 members. This helped us ensure that study participants are from both genders, belong to diverse religious strata of the society. SHGs are part of the community and maintain strong social connections with community. In collaboration with ANMs and ASHAs, they co-organize community-based IEC activities and have a deeper understanding of the issues faced by community members. In-depth interview were conducted among married males (n=34), from the Thirubhuvanai area, aged 18-45 yr, working as clerks, attenders, and drivers in our institution, selected by convenience sampling.

Force field analysis (FFA) was conducted with 14 purposefully selected participants, identified through the FGD who possessed the requisite knowledge to explore further information related to barriers and solutions.

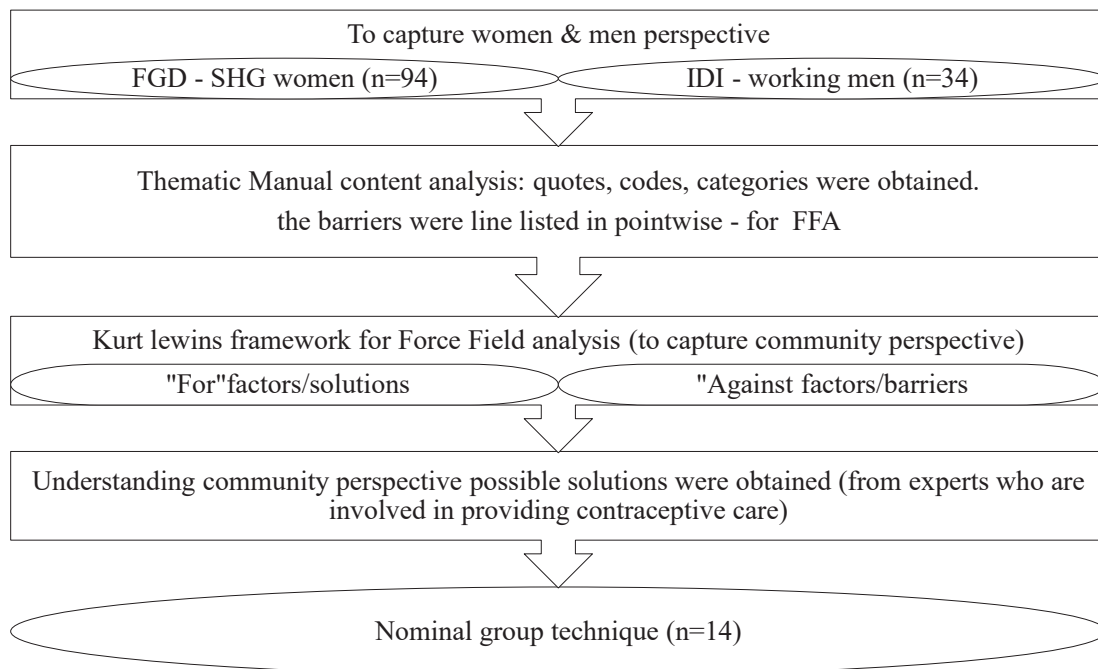


Fig. 1. Sequence of qualitative techniques.

Nominal group technique (NGT)¹⁷ was employed with specialists, including surgeons (3), obstetricians and gynaecologists (2), public health experts (6), medical officers (2), and counsellor (1). They were selected using a purposive sampling technique, as they are actively involved in routine family planning services. This approach ensured both maximum variation and key informant sampling strategies. The sequence of qualitative techniques is depicted in figure 1.

Data collection procedure: Participants were recruited with the assistance of a medical social worker with 18 years of field experience, who reached out to SHG members in the community and informed them about the purpose of the study. The FGD was conducted in a location and time convenient to all participants, by following the AMEE guidelines¹⁵. Written consent was obtained, and all FGDs were conducted for females by female faculties trained in qualitative research after an ice-breaking session. Each FGD lasted for 45-50 min. An interview guide with open-ended questions was used to lead the conversation. ‘What are your perspectives about vasectomy? What are the barriers to adopting vasectomy? And what are the solutions you suggest to increase vasectomy uptake?’. All the discussions were conducted in Tamil by the faculty trained in qualitative research and all the sessions were audio recorded. To ensure participant validation, debriefings were done before concluding each interview, allowing

participants to add extra information. An in-depth interview was conducted for males separately by male faculty trained in qualitative research during their free time in a separate room to ensure privacy.

Followed by FGD and IDI, FFA was conducted with purposefully selected women who were more actively contributing in FGD to capture the magnitude of specific barriers and facilitating factors for vasectomy uptake. Among the key barriers and facilitating factors that were identified through FGDs, the top five were prioritized through consensus by the participants of the FFA. Each factor was recorded in the participants' native language on uniformly sized and shaped cards for easy understanding. They were asked to place the card at the distance from the central line of neutrality based on the magnitude of the problem. The note taker documented the discussion and the entire activity lasted for about one hour and 30 min.

Nominal Group Technique: The NGT was conducted to explore the possible solutions from the health workers' perspective to improve vasectomy service utilization for the key barriers to vasectomy uptake, which evolved from the FGD and FFA. A consensus was developed for the key challenges and solutions. The process consisted of three steps. Informed written consent was obtained from all stakeholders participating in the study. The facilitator first described the purpose

Table I. Profile of participants involved in the study

Variables	FGD (n= 94)	IDI (n=34)	FFA (n=14)	NGT (n=14)
Target audience	SHG females	Married males	SHG	Specialists
Age (yr)	18-45	18-45	18-45	27-53
Gender	Female	Males	Females	Both male & female
Religion	Hindu (7 FGDs), Muslim (2), Christian (2)	Hindu (18), Muslim (9), Christian (7)	Hindu (9), Muslim (5)	Hindu (12), Christian (2)
Occupation	SHG members engaged in community IEC activities	Clerks, attenders, drivers	SHG members	Surgeons (3), OBGs (2), Public health experts (6), Medical officers (2), Counsellor (1)

FGD, focused group discussion; IDI, in-depth interview; FFA, force field analysis

and process of the study. Participants individually wrote potential solutions on paper without engaging in discussions. These were then collected. The second step involved discussion and the sharing of ideas. Each solution was written on a board so that it was visible to all the members, and similar points were clubbed together. This process was completed to the point of saturation. The third step was voting and discussion. The solutions evolved during the second step were ranked based on repetition. Then participants were free to share their ideas. Finally, participants were given the opportunity to revise their initial ranking, based on the group discussion. The participants were not pressured to alter their ranking or to achieve consensus, and the facilitator ensured equal participation of the members.

Analysis: Manual content analysis was conducted by two investigators independently, following Elo and Kyngäs (2008)¹⁸. Interviews were conducted in Tamil. Audio recordings were transcribed in English. The transcripts underwent extensive reading, editing, and proofreading. Categories were created by combining codes taken from the transcript¹⁵. By consensus, any differences in the coding were settled. An additional faculty member who was not involved in the study but has training in qualitative research evaluated the findings to improve the study's internal validity. Lincoln and Guba's four criteria—credibility, dependability, confirmability, and transferability—were employed to assess the data's reliability.¹⁹ We used multiple data triangulation and investigator triangulation to increase the credibility and confirmability of study findings. We collected data from different stakeholders to ensure the representativeness of the general population. The study findings are reported using the 'consolidated criteria for reporting qualitative research' guidelines^{14,19}.

Results

The profile of participants involved in the study is shown in table I. Participants' response in seven

categories regarding barriers for uptake of vasectomy are summarized in table II. Factors identified by forcefield analysis as barriers/facilitators are shown in figure 2. Solutions evolved from experts' point of view in nominal group technique were categorized under individual level, family level, community level and policy level and presented in table III.

Discussion

The current study highlights multifaceted barriers that hinder the use of vasectomy in rural India, such as family resistance, religious convictions, gendered expectations, social stigma, fear of impotence, and physical frailty. In keeping with long-standing patriarchal norms and power relations, males frequently view family planning as a female responsibility while women are urged to get sterilized. Male family planning participation is further constrained by knowledge gaps, low educational attainment, economic vulnerability, and adverse work settings, whereas temporary techniques continue to be the most used approach.

These results are consistent with research from India and other nations where male sterilization is discouraged by cultural taboos, social standing, and masculinity^{4-8,10,12,20,21}. According to Kandiyoti's "patriarchal bargain" gendered attitudes and spousal influence account for why women consent to sterilization whereas males do not²¹. International research has demonstrated that improving male uptake involves counselling couples, interacting with religious leaders, and disseminating culturally appropriate information^{19,22-25}. There has been persistent scepticism of vasectomy programs due to the legacy of coercive '*nasbandi*' camps, which frequently targeted underprivileged classes^{12,21}. Studies show that a male-centric approach led to increased vasectomy use in Nepal (7.8%), Brazil (5.1%), and Colombia (3.4%)². Without true promotion of vasectomy, the NHP's goal

Table II. Barriers for vasectomy uptake evolved during focused group

Category	Codes	Quotes
Personal belief	Fear of impotency	<i>'Honestly speaking they reason why we don't accept vasectomy is fear of erectile dysfunction and it will affect the sexual life. Indirectly it leads to lots of fight in the family'</i> (by van driver and clerk) <i>'Indirectly it leads to lots of fight in the family'</i> (by male driver)
	Misjudgement	<i>'My wife will underestimate me after surgery and she will suspect me for illegal affair as women cannot become pregnant'</i> (Male worker)
Gender discrimination	Patriarch	<i>'For men, capability of reproducing is considered pride, hence men with many children were regarded by their community as powerful and respected.'</i> (Female SHG Member) <i>'My husband is the decision maker in the family and he tells that giving birth and doing sterilization should be decided by me.'</i> (Female SHG Member) <i>'It touches men's ego and dignity; community may treat them badly.'</i> (Female SHG member)
	Social stigma	<i>'It is a challenge for men to accept and opt for sterilization as it touches their ego and their dignity, which cannot be changed for years'</i> (Female SHG Member) <i>'In the community he will be treated badly it will affect their dignity'</i> (Female SHG Member)
	Job insecurity	<i>'I will be unfit for job as my health will come down after surgery and hence there is a chance to terminate me'</i> (by male attended) <i>'In many private institutions, they don't support, they can only take their medical leave and allowable leave'</i> (said by male clerk) <i>'His colleagues and peer group in the work place may illtreat him'</i> (said by SHG women)
Religious belief	Gift from God	<i>'Polygamy is accepted in the religion and men can have up to four wives and as many children as they want. They believe children are god's blessing. Hence, in our custom, they don't go for abortion as well as sterilization.'</i> (women Muslim SHG leader) <i>'Sterilization technique like vasectomy is a sin'</i> (male Muslim attend) <i>'In our religion vasectomy is allowed, but the only thing is it is unacceptable by the men and it cannot be forced as it is against societ'</i> (Hindu SHG member)
	It is a sin	<i>'Some religions are still against contraceptive use because it is considered against nature, the beliefs suggest being fruitful and multiple, hence permanent sterilization is against religion'</i> (women Christian SHG member and male Christian attender)
Family disputes	Opposition/hesitation	<i>'They always find some reasons. My husband said in case if we both get separated or divorced why should he do vasectomy'</i> (Female SHG member) <i>'As anything can happen anytime it is always safe to use temporary methods like condom and avoid vasectomy'</i> (Male worker)
	Family pressure	<i>'My husband said I don't force you to do surgery for sterilization, likewise you also don't tell me to do as my mother will not agree. You should also listen to your in-law'</i> (Female SHG member)
Health literacy	Knowledge gap	<i>'I have heard about vasectomy but don't know its side effects.'</i> (Male attender)
		<i>'Vasectomy reduces masculinity and strength.'</i> (Male worker)
		<i>'I have read about vasectomy in health pamphlets; I know it doesn't affect masculinity.'</i> (Male clerk) <i>'Some men still fear impotence, but educated men in our village understand the procedure better.'</i> (SHG member)
Family planning practices	Common options	<i>'We mostly use condoms or withdrawal; it is safer and reversible'</i> (Male worker)
		<i>'Vasectomy is rare among men; tubectomy is sometimes done by women.'</i> (Female SHG member)
		<i>'Sometimes we discuss responsibility, but mostly women use pills or condoms without consulting men.'</i> (Male driver)

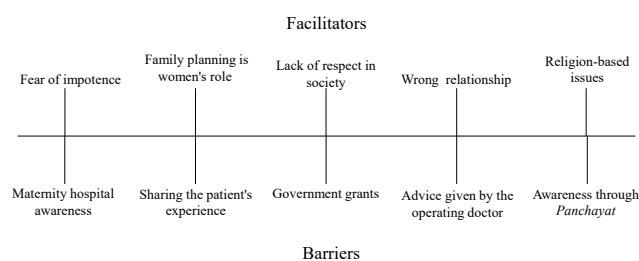


Fig. 2. Force field analysis depicting for/against factors for vasectomy uptake.

of raising vasectomy prevalence promptly may not be achievable.

Several practical alternatives were proposed by stakeholders, such as collaborative counselling between husband and wife in ANC clinics, a thorough explanation of non-scalpel vasectomy, involving celebrities, religious leaders, and local leaders to promote vasectomy, and increasing government incentives and workplace support. International

Table III. Solution evolved from stakeholders from nominal group technique

Individual level	<ul style="list-style-type: none"> • Use real life success stories from Men who have undergone vasectomy to build trust and reduce stigma and can be advocates. • Interpersonal communication through male multipurpose workers to clarify the misconceptions and promote vasectomy. • Educate the partner that vasectomy is a less painful and less complicated procedure and enforce no-scalpel vasectomy by physician. • Create a positive environment for men to choose vasectomy and adopt a positive deviance approach involving people celebrities and leaders to promote vasectomy
Family level	<ul style="list-style-type: none"> • Counselling for couples: Encourage husband-wife joint counseling to make vasectomy a shared decision in ANC Clinic. • Educate that family planning is not just a woman's role • Sex education to men to share the family planning responsibility. • Respect diverse cultural beliefs and create culturally sensitive tailored interventions.
Community level	<ul style="list-style-type: none"> • Role of leaders: Can engage local leaders, religious figures and community influencers (celebrities) to advocate for vasectomy as family planning choice. • Community awareness campaign: Community awareness and education regarding common myths like vasectomy affects masculinity, strength or sexual performance by providing accurate medical information by urologist and surgeons. • Religious leaders: Engage local imams, priests, and community elders to clarify misconceptions and promote responsible family planning. • Role of media: Raising awareness through television, radio, short films and advertisements, social media campaigns and creating positive perception of vasectomy among men and their families. • Counter the misinformation of media by showcasing successful stories and positive experiences of men who have undergone vasectomy to media in waiting area in ANC Clinic. • Role of field level worker to create IEC activities in the community. • Men's support groups: Form community groups where men discuss their reproductive choices openly. • Ensure vasectomy is available at government hospitals with incentives.

research supports these tactics by showing that male-targeted initiatives, collaborative decision-making, and counselling greatly boost the uptake of vasectomy^{18,19,21-23}. This would ease the burden on women. Experts' opinions were similar to the Supply-enabling environment-demand (SEED) programming model²² which involves adoption of evidence-based vasectomy techniques such as no-scalpel vasectomy and mobile outreach should be improvised²⁴. Therefore, it is important to consider vasectomy resistance as a result of intersections of gendered power relations, caste, religion, and patriarchy rather than only ignorance.

This study has captured the Emic perspective of the rural participants. The principles of PRA (Participatory Rural Appraisal), such as reversal of learning, learning rapidly and progressively, offsetting biases, triangulating, and seeking diversity, were adopted in our study. Highlighting driving and restraining forces, it helps identify leverage points where interventions can be most effective, facilitating targeted action. Triangulation enhanced the validity and richness of their findings. Even though, diverse participants were included, generalizability is the challenge as the study was conducted in a single rural setting, with a possibility of social desirability bias. This study finds that patriarchal norms, religious beliefs, workplace

concerns along with stereotypes of impotence limit vasectomy acceptance in rural India. Using feminist and sociological perspectives, it shows men's resistance is shaped by cultural memory and gendered power relations. Promoting vasectomy requires collaborative efforts involving men, spouses, employers, and religious leaders, not just information campaigns. By integrating expert insights and rural voices the study highlights socio-cultural barriers and emphasizes reframing vasectomy as a shared responsibility for gender-equitable family planning.

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